

# **AMENDMENTS TO THE CLAIMS**

Please amend the claims as indicated hereafter.

The following is a copy of Applicant's claims that identifies language being added with underlining ("\_\_\_") and language being deleted with strikethrough ("—"), or brackets ("[ ]"), as is applicable:

1. (Currently Amended) An osteosynthesis and compression screw for coaptation of small bone fragments, the screw being formed by a single longitudinal body having a longitudinal axis, and comprising:

- a proximal portion formed by a screw head provided with an outside thread, said proximal portion being of diameter greater than the diameter of the remainder of the screw;
- an intermediate portion having no thread; and
- a distal portion provided with an outside thread;

wherein:

- each of the screw head and the distal portion includes at least one helical groove, firstly extending over the entire axial length of its thread, and secondly being formed through each thread in such a manner to form tapping means; and

- the terminal zone of the distal portion is provided with preparation means for preparing a housing in the bone fragments for receiving the intermediate and distal portions of the screw;

and, wherein said screw is used for coaptation of bone fragments in the step of:

compressing said bone fragments together by the insertion and turning of said screw.

2. (Cancelled)

3. (Previously Presented) A screw according to claim 1, wherein the obliqueness of each helical groove lies in the range of about 20° to 40°, and is preferably about 25°.

4. (Currently Amended) A screw according to claim 1, wherein the depth of the grooves each said groove is constant.

5. (Previously Presented) A screw according to claim 1, wherein the depth of the grooves each groove varies regularly from the start towards the finish of each groove.

6. (Original) A screw according to claim 5, wherein the depth of each groove increases going towards the terminal zone of the screw.

7. (Original) A screw according to claim 6, wherein the final portion of each groove penetrates into the thickness of the body of the screw.

8. (Original) A screw according to claim 1, wherein the preparation means are formed by a tooth extending substantially axially.

9. (Original) A screw according to claim 1, having three grooves regularly angularly spaced apart around the longitudinal axis, and formed in the proximal and distal portions.

10. (Original) A screw according to claim 1, the screw being provided with a central longitudinal bore to form a hollow screw.

11. (Original) A screw according to claim 9, the screw being provided with a central longitudinal bore to form a hollow screw, and wherein each junction between the grooves and the central bore includes a tooth forming the preparation means.

12. (Previously Presented) A screw according to claim 2, wherein the obliqueness of each helical groove is about 25°.

13. (Currently Amended) An osteosynthesis and compression screw for coaptation of small bone fragments, the screw being formed by a single longitudinal body having a longitudinal axis, and comprising:

- a proximal portion formed by a screw head provided with an outside thread, said proximal portion being of diameter greater than the diameter of the remainder of the screw;
- an intermediate portion having no thread; and
- a distal portion provided with an outside thread;

wherein:

- each of the screw head and the distal portion includes at least one helical groove, firstly extending substantially over the entire axial length of its thread, and secondly being formed through each thread in such a manner to form tapping means; and

- the terminal zone of the distal portion is provided with preparation means for preparing a housing in the bone fragments for receiving the intermediate and distal portions of the screw;

and, wherein said screw is used for coaptation of bone fragments in the step of:

compressing said bone fragments together by the insertion and turning of said screw.

14. (Previously Presented) A screw according to claim 13, wherein the obliqueness of each helical groove lies in the range of about 20° to 40°

15. (Currently Amended) An osteosynthesis and compression screw for coaptation of small bone fragments, the screw being formed by a single longitudinal body having a longitudinal axis, and comprising:

- a proximal portion formed by a screw head provided with an outside thread, said proximal portion being of diameter greater than the diameter of the remainder of the screw;
- an intermediate portion having no thread; and
- a distal portion provided with an outside thread;

wherein:

- each of the screw head and the distal portion includes at least one groove, firstly extending substantially over the entire axial length of its thread, and secondly being formed through each thread in such a manner to form tapping means, wherein the depth of each groove varies regularly from the start towards the finish of each groove; and
- the terminal zone of the distal portion is provided with preparation means for preparing a housing in the bone fragments for receiving the intermediate and distal portions of the screw;  
and, wherein said screw is used for coaptation of bone fragments in the step of:  
compressing said bone fragments together by the insertion and turning of said screw.

16. (Previously Presented) A screw according to claim 15, wherein the depth of each groove increases going towards the terminal zone of the screw.

17. (Previously Presented) A screw according to claim 15, wherein the final portion of each groove penetrates into the thickness of the body of the screw.

18. (Previously Presented) A screw according to claim 15, wherein the preparation means are formed by a tooth extending substantially axially.

19. (Previously Presented) A screw according to claim 15, having three grooves regularly angularly spaced apart around the longitudinal axis, and formed in the proximal and distal portions.

20. (Previously Presented) A screw according to claim 15, the screw being provided with a central longitudinal bore to form a hollow screw.